

SECTION C – DESCRIPTION/SPECIFICATION /WORK STATEMENT

STATEMENT OF WORK

INTRODUCTION AND BACKGROUND

The National Aeronautics and Space Administration (NASA) Glenn Research Center defines and develops advanced technology for high priority national needs. The work of the Center is directed toward new propulsion, power, and communications technologies for application to aeronautics and space, so that U.S. leadership in these areas is ensured. The end product is knowledge, usually in a report, that is made fully available to potential users--the aircraft engine industry, the energy industry, the automotive industry, the space industry, and other NASA centers.

Glenn comprises over 100 buildings on a 351-acre main campus, adjacent to Cleveland Hopkins International Airport and a 6453-acre Plum Brook field station near Sandusky, Ohio, 50 miles west of Cleveland. Since the groundbreaking at Cleveland on January 23, 1941, for the then Aircraft Engine Research Laboratory of the former National Advisory Committee for Aeronautics, approximately \$480 million has been invested in the Center's capital plan. The estimated replacement cost is approximately \$1.4 billion.

Over 3,500 people staff Glenn, including civil service (CS) employees and support service contractors (SSC). Over half of them are scientists and engineers, who plan, conduct or oversee, and report on the research tasks and projects of the Center. Technical specialists, skilled workers, and an administrative staff assist them. An extensive base support services activity is required to support these programs. This contract covers those services.

Visit the NASA Glenn Research Center World Wide Web (WWW) Homepage at <http://www/lerc.nasa.gov/>.

C-1 SCOPE

The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary and incidental to the performance of the work identified below.

The work shall include logistics, imaging technology, scientific and technical publishing,

metrology services, library, administrative and clerical support.

In addition to the description of work identified, the Contractor is responsible for all administrative and clerical activities associated with performing each task.

C-2 REQUIREMENTS

2.1 All work shall be performed in accordance with the specific general requirements identified in each task and Federal, State, local, NASA, and Glenn policy, regulations, and procedures. The Contractor's workweek shall be Monday through Friday, 8:00 a.m. through 4:30 p.m. unless otherwise specified in the Statement of Work (SOW). Hours of work may vary in some task areas, however, the Contracting Officer's Technical Representative (COTR) having cognizance over the work performed will approve any variations.

2.2 The Contractor shall be subject to special audits, vulnerability assessments, self assessments and functional and internal control reviews conducted by the Government's General Accounting Office (GAO), Government Printing Office (GPO), NASA Office of Inspector General (OIG), or any other NASA review team.

2.3 The Contractor shall provide ongoing review of all operations to ensure regulatory compliance and quality control, and recommend improvements to productivity and service.

2.4 The Contractor shall plan and schedule work to ensure compliance with Government deadlines, schedules, and priorities.

2.5 Management services will not be limited to the routine administration of the contract, but will include continuous and aggressive attention to continuous process improvements throughout the contract period of performance.

2.6 The Contractor shall comply with all current Federal, State and local safety and health requirements, which apply to the type of work being performed under this contract and all revisions or changes, which come into effect during the period of performance. The Contractor shall report to the CO and COTR, by the 15th of each month, the injury experience for the preceding month.

2.7 The Contractor shall keep its work areas neat, with all waste materials, trash, and debris deposited in waste containers furnished by the Government. The Contractor shall keep areas immediately surrounding the work areas neat and free of trash and debris. This includes truck entrances to docks and approach ways.

2.8 The Installation Accountable Government Property (IAGP) available to perform the various tasks in the SOW is identified in Attachment B.

C-3 PERFORMANCE BASED CONTRACTING

This contract is a performance-based contract. Throughout the contract you will find subparagraphs within the tasks that identify the general requirements to follow, the description of work to be performed, and the quality standards that shall be used to evaluate performance. The performance requirements being used to determine acceptable performance are Quality, Schedule, and Documentation. These are the essential products of the task and, as such, shall be given close attention in the Contractor's Quality Assurance Plan. The items identified in the description of work are requirements of the contract, and will also be inspected and evaluated.

- a. General requirements - Laws, regulations and standards to be used when performing the task.
- b. Description of work - The general scope of work to be performed under the contract. Specific activities may be identified.
- c. Quality standards - Objective performance standards to be used in evaluating the quality of the work performed. Quality includes compliance with regulatory requirements. Quality includes accuracy of work performed.
- d. Schedule - Timeliness or frequency of work to be performed.
- e. Documentation - Reporting requirements include data deliverables, data to be maintained (e.g. databases, logs, microfiche, etc.), standard and ad hoc reporting requirements.

Attachment A contains the Performance Requirements Summary (PRS) for the contract. The PRS quantifies the importance (weight) of the performance requirements within each task, the Standard Performance Level (SPL) and Acceptable Quality Level (AQL).

C-4 ADMINISTRATIVE AND FINANCIAL DATABASE (AFD)

The Contractor shall develop a comprehensive administrative and financial database capable of tracking and statusing all contract work, associated management information, and funding status. The system shall include the following data elements.

- 1. NASA TR Listing
- 2. Task Order Listing
 - a. Task Detail
 - b. Authorized Task Orders
 - c. Pending SF-347s
- 3. Purchase Request
 - a. Contract Totals
 - b. NASA Divisions
- 4. Contractor Reports
 - a. Contract Management Plan
 - b. Quality Assurance Plan
 - c. Organization Chart

5. Performance Reports
 - a. LTID Metrics
 - b. Performance Standards
 - c. Performance Evaluation
6. Monthly Financial Reports
 - a. 533M
7. Staffing Reports
 - a. Summary
 - b. By Employee
8. Full Cost Reporting
 - a. Burn Rate Analysis
 - b. Shadowing Reports
9. Technical Operating
 - a. ISO 9000 Work Instructions
 - b. Standard Operating Procedures
10. Metrics
 - a. Contract Metrics (reserved)
 - b. Others to be developed
11. Technical Reporting Requirements
Each SOW task paragraph e.

The Contractor shall provide computer support services to develop and maintain this database for use by the Government. Database development shall be completed within 30 days of contract start. No Government computer services will be made available for the purpose of development of this administrative task. The Contractor shall prepare status reports throughout the development process.

The Contractor shall establish administrative funding, cost, staffing, task detail and other tracking information procedures that are uniform for all contract. These formats represent sample computer screens along with a description of the information to be accessed through that screen. Expenditures shall be tracked against the budget established for each task. Actual deviations from budget shall be highlighted in monthly status and progress reports. This system shall have the capability to print reports. Cost information in this database shall tie directly to the Contractor's financial management system and this same data shall be used in the Contractor's 533M submittal. The Contractor shall provide updates to the system through direct networking capability. This comprehensive contract management database represents the tool that both the Government and the Contractor shall use to monitor administrative cost and performance under this contract. The Contractor's administrative cost and schedule tracking approach shall be described in the Business Management Plan.

Administrative and Financial Database

Administrative and Financial Database (AFD) is a cumulating of all reporting requirements. AFD represents a set of management information to be used by both the Government and the Contractor in the overall management and monitoring of contract activities. The AFD, as it

exists and is further developed, is the property of the Government and access shall be made available to the Contracting Officer and other Government monitoring personnel as identified by the COTR.

	Title	Purpose	Current File
1.	NASA TR Listing	Identify persons responsible in each task area. Should contain the name of the Government monitor and corresponding Contractor person responsible for each task at the lowest level of management.	None
2.	Task Order Listing		
a.	Task Detail	Cumulative list of all task orders issued under the contract. Information from the task order including date, short description, long description, task number, value, period of performance, estimated cost, etc. Include any other additional data that would be used during the course of tracking task orders for the life of the contract.	None
b.	Authorized Task Orders	Distinguish between those task orders that have been received by the Contractor, Contractor estimate completed, and task order approved by the Contracting Officer.	None
c.	Pending SF-347s	Those task orders that are pending approval by the Contracting Officer.	None
3.	Purchase Request		
a.	Contract Totals	Information used for tracing funding received from other than the Logistics and Technical Information Division (chargeback) for services provided by each of the service pools, and total chargeback funding received on the contract	None
b.	NASA Divisions	Funding received from each division and program paying for services within each service pool.	None

4.	Contractor Reports		
a.	Contract Management Plan	Submitted with proposal and throughout the contract as revised. Discussion of planned management philosophy.	None
b.	Performance Standards	Translated from Government performance standards. This should be the basis further development of the Performance Reports below.	None
c.	Organization Chart	Show lines of authority and responsibility for each task area, performance management, and program management.	None
5.	Performance Reports		
a.	LTID Metrics	Collection of various statistics required on a task. . Statistics are used for various reporting purposes.	Various, Excel Word
b.	Performance Standards	Continuation of the development of the performance standards. Contractor shall identify the measurement tools to be used to evaluate their performance, the estimated workload, and their method of surveillance to be used in the monthly evaluation process. These performance standards shall be maintained, by the Contractor, through a configuration control process, and shall not change without written approval from the Contracting Officer or delegated representative.	Excel

c.	Performance Evaluation	Contractor's monthly evaluation of the performance standards along with a description of how the information leads to the evaluation score. The evaluation score will be used to determine the incentive fee to be awarded on a six-month basis.	Excel
6.	Monthly Financial Reports		
a.	533M	Monthly financial reports used for monthly cost accrual and estimates to complete.	Contractor owned system
7.	Staffing Reports		
a.	Summary	Personnel Report Summary shall identify the number personnel, both full-time and part-time, supporting each of the task areas. Numbers should not represent headcount, but should represent FTE.	Excel
b.	By Employee	Employee By Task shall identify supporting organization, name, job title, hours per week, any comments and effective date of comments. Employees are broken out by task. Totals shall represent both the numbers of employees and equivalent FTE. .	Excel

8.	Full Cost Reporting		
a.	Burn Rate Analysis	The 533s show actual cost compared to negotiated contract costs. The burn rate analysis reports compare actual costs (from the Contractor 533's) to the LTID budget allocation for the fiscal year. Comparisons of labor and ODC plans vs. actuals are shown in each of the reporting areas. Funding allocations and projected requirements are also shown.. Also, for purposes of tracking chargebacks, costs to be recovered from other divisions are defined and tracked throughout the year	Excel
b.	Shadowing Reports	In preparation for implementation of Full Cost at the Center, each service pool is required to "shadow" their costs. Shadowing is the identification by task number of the cost of the product or service being provided. The shadowed cost is derived from the "Products and Service" price list developed by each of the service pools. The shadowing reports represent a detail of costs by task number and a summary by program for each service pool. It is the intent that the shadowed costs would be equal to the cost of operating the service pool. Now these costs include Contractor salary, ODCs, and Government PRs. In a full cost environment these costs will also include the cost of the civil servants and other pool to pool costs.	Collect by various methods. Summary in Excel

9.	Technical Operating		
a.	ISO 9000 Work Instructions	Contractor is responsible for the development of work instructions as identified in Section C, paragraph C.8. Filing of those instructions shall be done according to ISO 9000 Project Office and Logistics and Technical Information Division procedures. The AFD shall reference the appropriate location of the work instructions.	Word
10.	Metrics		
a.	Contract Metrics	(Reserved)	Excel
b.	Others to be developed	Within each of the task areas, various metrics reports and developed and submitted to the TR for review and approval prior to being submitted to Headquarters. Formats for reports already being developed are available to the Contractor; others shall be developed and maintained in the AFD.	Excel Word
11.	Technical Reporting Requirements		
a.	Each SOW task paragraph e.	Statement of Work contains the documentation required with each task. (Refer to paragraph e. within each task.) The AFD shall be used as a server for access to the reports required. In cases where the reports are summarized from an existing database, a PDF file will be made available in the AFD.	Excel Word PDF Others as identified

C-5 ADMINISTRATIVE REPORTING REQUIREMENTS

The Contractor shall submit administrative and financial reports as defined below and make them available in the AFD. All data submitted shall be as of the end of the month. In the event of teaming arrangements, one report shall be submitted by the team. Subcontract reports shall also be as of the end of the month and directly traceable to the Prime Contractor's reports. To reduce paperwork, reports shall be available in the Administrative and Financial database in Excel and Word formats. A paper copy shall be submitted to the Contracting Officer (CO), COTR and Resource Analysis and Management Office (RAMO). Other personnel may be identified to receive a paper copy after contract start. The database shall be available to the CO, COTR, RAMO and personnel within the Logistics and Technical Information Division (LTID).

A. CONTRACT MANAGEMENT PLAN

The Contractor shall submit a revised Contract Management Plan. The plan shall include any revisions made since the proposal was submitted. The plan shall also include, as a minimum, documentation on the administrative and financial database, organizational charts with lines of authority, responsibilities at each level of authority, lines of communication and other interfaces with team members and major subcontractors and staffing plans. The Contractor shall submit to the CO and COTR two copies of the contract management plan 30 days after contract start and as changes occur throughout the contract period with revisions marked.

B. METRICS

The Contractor shall maintain the LTID metrics as part of the AFD. The LTID metrics measure various services performed under this contract.

C. PERFORMANCE STANDARDS

During the phase in period, the performance requirements summary (PRS) shall be translated, in consultation with the Government, into the performance standards format provided by the COTR. These standards shall be managed by the Contractor in the AFD with a configuration control process. Standards will be revised through a modification to the contract.

In addition to the PRS standards, the estimated workload and method of surveillance as described in the Contractor's Quality Assurance Plan (QAP) shall be included.

These performance standards represent the basis for the incentive fee performance evaluation. PRS shall be translated within 30 days of contract start. Reporting against these standards shall begin at the end of the first full month after contract start.

D. PERFORMANCE EVALUATION

The performance evaluation data shall be maintained in the AFD. The Contractor shall conduct a self-evaluation based on the performance standards. Assessment shall be completed monthly for review by the cognizant TR by the 10th day of the following month.

E. QUALITY ASSURANCE PLAN (QAP)

The Contractor shall submit a detailed QAP identifying the methods of surveillance to be used to verify that Standard Performance Levels (SPL) are reached and maintained. The QAP shall include the Contractor's plan to develop an approach to implementing changes required to meet the SPL. A single quality assurance point of contact shall be identified for daily coordination of performance defects. The plan shall be submitted with the proposal, the details of inspection methods and levels for each task area shall be submitted within thirty days of contract start and as revised.

F. FINANCIAL MANAGEMENT REPORTS

Financial Management Report, NASA Form 533M, shall be submitted monthly not later than ten (10) working days following the end of the month in accordance with NPG 9501.2C dated April 23, 1996. Teaming and major subcontractors' reports shall be submitted at the same time. Subcontractor reports shall use the same accounting calendar as used by the prime. Subcontractor reports shall balance to the prime Contractor report. Paper copies shall be distributed in accordance with the distribution list provided by the COTR. An electronic version shall be provided on a disk medium in the format required by FMD. An Excel spreadsheet format shall also be available in the AFD.

Tasks shall be reported at the level identified below including actuals and estimates as identified in the instructions for preparation of Financial Management Reports, NASA Form 533M. Total contract summary shall add together all tasks reporting total contract costs and estimates.

REPORTING CATEGORIES

Total Contract

- 1.0 Logistics
 - 1.1 Property Management
 - 1.2 Freight Traffic
 - 1.3 Stock Purchases
 - 1.4 Supply Management
 - 1.5 Transportation Operations
- 2.0 Imaging Technology
- 3.0 Publishing

- 4.0 Metrology
- 5.0 Library
- 6.2 Administrative Programs
- 6.3 Drawing File Management, Maintenance and Reproduction
- 6.4 Organizational Development and Training Office Support
- 6.5 Community and Media Relations Editorial Support
- 6.6 Financial Management Support
- 6.7 Resource Analysis and Management Office Support
- 6.8 Administrative Project Coordination
- 6.9 IAPG Power Information Center
- 6.10 Space Program Development
- 6.11 Information Systems Support (ISS)
- 6.12 Educational Programs Support
- 6.13 Commercial Technology Program Support
- 6.14 Analex Contract Closeout Property Assessment
- 6.15 SBIR/STTR Program Support
- 6.16 Mobile Television Production Van
- 6.17 Technology Conference Support
- 6.18 Science Engineering Mathematics Aerospace Academy (SEMAA) Program Management Support
- 6.19 Telescience Support Center (TSC) Property Assessment
- 6.20 Army Corps. Of Engineers Administrative Support
- 6.21 Business Development and Marketing Support
- 6.22 (Reserved)
- 6.23 Office of Education Programs, Program Coordinator
- 6.24 Educational Technology Specialist Support
- 6.25 Communications Support for Manufacturing and Engineering Division
- 6.26 Administrative Support of the Manufacturing Engineering Division
- 6.27 Advanced Communications Satellite (ACTS) University Education Consortium Support
- 6.28 Airport Expansion S-40 Asset Relocation
- 6.29 History of NASA's Plum Brook Reactor Facility
- 6.30 Integrated Financial Management (IFM) Program Training Coordination
- 6.31 Records Management
- 6.32 RETF Historical Preservation
- 7.2 0100/Office of the Director
- 7.3 0120/Office of Chief Counsel
- 7.4 0140/Aeropropulsion Research Program Office
- 7.5 0106/ISO Project Office
- 7.6 0170/Plans and Programs Office
- 7.7 0180/Office of Equal Opportunity Program
- 7.8 0220/Resources Analysis and Management Office
- 7.9 0220/Financial Management Division (Reserved)

- 7.10 0300/Vehicle Technology Directorate
- 7.11 0400/Office of Human Resources
- 7.12 0500/Office of Safety and Assurance Technologies
- 7.13 0610/Procurement Division
- 7.14 2000/Aeronautics Directorate
- 7.15 5000/Research and Technology Directorate
- 7.16 6100/Space Communications Office
- 7.17 6500/Space Transportation Project Office (Reserved)
- 7.18 6700/Microgravity Science Division
- 7.19 6900/Power and Propulsion Office
- 7.20 7100/Computer Services Division (CSD)
- 7.21 7200/Test Installations Division (TID)
- 7.22 7400/Manufacturing Engineering Division (MED)
- 7.23 7500/Facilities and Test Engineering Division (FTED)
- 7.24 7700/Engineering Design and Analysis Division (EDAD)
- 7.25 9200/Office of Educational Programs (OEP)
- 7.26 6000/Space Directorate
- 7.27 7800/Systems Engineering Division
- 7.28 9300/Community and Media Relations Support
- 7.29 9400/Commercial Technology Office Support
- 7.30 9000/External Programs Directorate
- 7.31 Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) Program Support
- 7.32 0160/Office of the Inspector General
- 7.33 7740/Structural Analysis Branch

The 533M shall be submitted using the format provided by the COTR. A single page shall be submitted for each of the reporting categories identified above as well as for the total contract.

A summary report by task shall be submitted with the 533M in the format provided by the COTR

G. BURN RATE ANALYSIS REPORT

The purpose of the burn rate analysis report is to track the actual costs incurred versus the LTID yearly available budget. The report shall be submitted to the COTR by the 20th day of each month. Both the Contractor and the COTR shall review the report to determine funding requirements or changes required to meet the available budget.

While the negotiated value of the contract does not change without the CO signature, this report is fluid and the budget availability may change consistent with current Center and LTID requirements. This report shall contain one page for each task that LTID is responsible for along with a graphic depiction of the three full cost areas. The graph shall indicate progress in recovering funding from other areas that have been charged for services LTID has provided.

The following tasks shall be included:

- 1.1 Property Management
- 1.2 Freight Traffic
- 1.3 Stock Purchases
- 1.4 Supply Management
- 1.5 Transportation Operations
- 2.0 Imaging Technology (plus graph)
- 3.0 Publishing (plus graph)
- 4.0 Metrology (plus graph)
- 5.0 Library
- 6.2 Administrative Programs
- 6.11 Information Systems Support
- Total LTID

H. STAFFING REPORTS

The Contractor shall submit to the CO and COTR the following staffing reports no later than ten (10) working days following the end of the month.

1. Personnel Report - The Personnel Report shall include the number of full-time-equivalent personnel in each task area for the total contract.
2. Employees by Task - The Employees by Task report shall include the name of each employee, the organization supported, the job title, comments, and effective date of actions.

Data shall be reported using the same accounting calendar as the NASA Form 533M. Staffing reports shall be submitted along with the monthly 533M reports, and made available in the AFD.

C-6 TECHNICAL REPORTING REQUIREMENTS

The Contractor shall provide technical reporting requirements as identified within each task paragraph “e. Documentation.”

C-7 FULL COST MANAGEMENT

Glenn Research Center, and NASA as an Agency, will be transitioning to a “full cost” form of management, budgeting, and accounting at the project level in FY00. The most significant change will be planning and accounting by project for civil servant salaries and benefits, which are currently funded by Congress under a separate appropriation. Another change will be the creation of service pools (cost centers). Users of the goods and services provided by each pool will be charged on a price per unit basis. Actual usage information will be required for each service pool to ensure the accurate charging for services provided. The following service pools are a part of this contract.

- 2.0 Imaging Technology
- 3.0 Publishing
- 4.0 Metrology

Prior to FY00, costs for each of these tasks will be shadowed, which means product and service price lists will be developed and customers will be apprised of what the costs would have been if full costing had been implemented.

Shadowing systems are in the preliminary stages of being developed for these service pools. Improvements in these systems shall be made in conjunction with the Government. Shadowed costs and actual costs for each service pool shall be collected and reported monthly. The Contractor shall provide computer systems support in the further refinement of the monthly reporting process. Data shall be maintained as part of the AFD.

C-8 ISO 9000 REQUIREMENTS

To meet the customer needs and maintain excellence as a research and technology provider. Glenn Research Center (GRC) has implemented a Business Management System (BMS). The BMS is an infrastructure through which key GRC processes are documented, performed, managed, assessed, and improved. Implementing the BMS enables the Center to:

- Maintain and improve the quality of its products and services
- Optimize the efficiency of its process
- Identify and correct problems
- Better Plan for the future

The BMS addresses processes beyond the scope of the ISO 9001 Standard. The GRC Quality System is encompassed in the BMS.

NASA is committed to being a work-class leader in scientific and technological research and development. To ensure NASA's continued presence as a leader in these areas, the Agency has directed the Centers to develop and implement quality systems that are compliant with the internationally recognized quality management standards, ISO 9001:1994. GRC has followed that directive and has developed and implemented an effective and efficient quality system which is designed to comply with all of the applicable elements of ISO 9001:1994. The BMS Quality System Manual describes the Glenn Research Center Quality System and provides policy and guidance for implementation of this important program.

The Glenn Research Center Business Management System (BMS) describes the Center's approach to ensure consistent and effective operation of those processes affecting the quality of GRC products and services. It includes the processes that relate to the elements of the ISO Standard, as well as the other business processes necessary to operate GRC. While the Quality System addresses the ISO requirement, these policies and procedures also apply to the Center's other core business activities.

GRC's primary product is leading-edge technology resulting from aerospace research activities. Products and services include design, development, test, and fabrication of research and test aerospace hardware and software for a variety of GRC customers. The activities and processes used to develop these products and services are the primary focus of the GRC Quality System.

Responsibility for these systems, their document generation, compliance to, continuous improvement and maintenance of (which includes but is not limited to updating or modifying), shall rest with the civil servant (CS) and support service contractor (SSC) employees involved with the functional areas that fall in the scope of the ISO 9000 and BMS Quality System.

The prime Contractor, team members or subcontractors under this contract are not required to be ISO 9000 certified; however Glenn Research Center is required to be certified. In support of that certification and in accordance with NPD 8730, NASA Quality Management System Policy (ISO 9000), and GLPD 8730.5, NASA Glenn Quality Management System Policy (ISO 9000), the Contractor shall develop work instructions for each of the following tasks supporting the

Logistics and Technical Information Division. The Contractor shall work in cooperation with LTID to complete these work instructions by September 30, 2000.

*BMS/ISO Procedures Listing
(as of April 26, 2000)*

Task	Center Level Procedure	Work Instruction
1.0 Logistics		
1.1 Property Management	LeR-P3.5 Equipment Management	LeR-W0620.3.5.001 Survey Report Processing
	LeR-P3.5.1 Equipment Reutilization	LeR-W0620.3.5.1 Reutilization - Screening Purchase Requests
	<i>GRC-P Hold Storage Program</i>	<i>TBD</i>
	<i>GRC-P Property Loans</i>	<i>TBD</i>
	<i>GRC-P Property Disposal</i>	<i>TBD</i>
1.2 Freight Traffic	<i>GRC-P Shipping and Freight Traffic Services</i>	<i>TBD</i>
1.4 Supply Management	<i>GRC-P Supply and Warehousing Services</i>	<i>TBD</i>
1.5 Transportation Operations	LeR-P3.9.3 Handling, Storage, Packaging, Preservation and Delivery	LeR-W0620.3.9.3.001 Handling
		LeR-W0620.3.9.3.002 Storage
		LeR-W0620.3.9.3.003 Processing of Damaged Material
		LeR-W0620.3.9.3.005 Delivery (Shipping)
		LeR-W0620.3.9.3.006 Receiving, Storage and Shipping of Hazardous Materials
		LeR-W0620.3.9.3.007 Maintenance of Training Records
		LeR-W0620.3.9.001 Receiving
		LeR-W0620.3.9.002 Receiving, Cal Lab
1.5.1 Personnel Transportation	<i>GRC-P Personnel Transportation</i>	<i>TBD</i>
1.5.2 Dry Cargo	<i>GRC-P Transportation Services</i>	<i>TBD</i>
1.5.3 Mail Processing	<i>GRC-P Mail Services</i>	<i>TBD</i>
1.5.5 Vehicle Maintenance	<i>GRC-P Vehicle and Equipment Maintenance</i>	<i>TBD</i>
1.5.6 Motorpool Vehicle Dispatcher	<i>GRC-P Motor Pool (Vehicle Dispatch) Operations</i>	<i>TBD</i>
1.5.7 Garage Administration	N/A	N/A
1.5.8 Fuels Distribution	<i>GRC-P Fuels Distribution</i>	

2.0 Imaging Technology	<i>GRC-P Imaging Services</i>	<i>TBD</i>
2.1 Production Administration Support		
2.2 Scientific Imaging		
2.3 Video/Multimedia		
2.4 Still Imaging		
2.5 Audiovisual		
3.0 Scientific and Technical Publishing, Duplicating, Copiers and Printing		
3.1 Scientific & Technical Publishing	LeR-P3.7.4 Reports Publication	LeR-W0620.3.7.4.001 Reports Publication Publishing Services Coordination Office
		LeR-W0620.3.7.4.002 Reports Publication Technical Editing
		LeR-W0620.3.7.4.003 Reports Publication Statistical Drafting
		LeR-W0620.3.7.4.004 Reports Publication Layout
		LeR-W0620.3.7.4.005 Reports Publication Conference Support Team
		LeR-W0620.3.7.4.006 Reports Publication Nondedicated Technical Illustration
		LeR-W0620.3.7.4.007 Reports Publication Dedicated Technical Illustration
		LeR-W0620.3.7.4.008 Reports Publication Errata Publishing
	<i>GRC-P Nonreport Publishing Services</i>	<i>TBD</i>
3.2 Duplicating, Copiers and Printing	<i>GRC-P Duplicating Services</i>	<i>TBD</i>

4.0 Metrology	LeR-P3.5.2 Control of Inspection, Measuring and Test Equipment	LeR-W0620.3.5.2.002 Cal Lab Non-Automated Cal Procedure/Datasheet
		LeR-W0620.3.5.2.003 Cal Lab Calibration Process
		LeR-W0620.3.5.2.004 Cal Lab User Evaluation
		LeR-W0620.3.5.2.005 Cal Lab Contract Acceptance
		LeR-W0620.3.5.2.006 Disposition of Unserviceable IMTE ...
		LeR-W0620.3.5.2.007 Cal Lab Document and Data Control
		LeR-W0620.3.5.2.008 Cal Lab Environmental Instruction
		LeR-W0620.3.5.2.009 Cal Lab IMTE Handling, Storage, Packaging, Preservation and Delivery
		LeR-W0620.3.5.2.010 Cal Lab Factory Process
		LeR-W0620.3.5.2.013 Cal Lab Low Oxygen Alarm
		LeR-W0620.3.5.2.014 Cal Lab Mandatory Recall
		LeR-W0620.3.5.2.017 Cal Lab Oxygen Cleaning and Recertification
		LeR-W0620.3.5.2.019 Cal Lab Production Control Instructions
		LeR-W0620.3.5.2.020 Cal Lab Quality Assurance/Quality Control
		LeR-W0620.3.5.2.024 Cal Lab Control of Cal Software
		LeR-W0620.3.5.2.025 Cal Lab Labmate Data Entry Instructions
		LeR-W0620.3.5.2.026 Cal Lab Equipment Traceability and Adequacy Instruction
		LeR-W0620.3.5.2.027 Cal Lab Training and Tech Qualification
		LeR-W0620.3.5.2.028 Cal Lab Factory/Safety Recall
		LeR-W0620.3.5.2.029 Cal Lab Impact Assessment of Nonconforming Product
	GRC-P Instrument Pool	TBD
5.0 Library	GRC-P Library Services	TBD

6.0 Administrative Support		
6.1 Unscheduled Administrative Support	GRC-P	TBD*
6.2 Administrative Programs		
6.2.1 Special Projects	N/A	TBD
6.2.2 Accounting Support	N/A	TBD
6.2.3 Directives, Handbooks, Guidelines and Directives Processing	LeR-P3.7.5 Agency/Center Directives	LeR-W0620.3.7.5.001 Processing Agency Directives (NPDs/NPGs)
		LeR-W0620.3.7.5.002 Processing Glenn Directives (GLPD/GLPG)
		LeR-W0620.3.7.5.003 Canceling Glenn Directives
		LeR-W0620.3.7.5.004 Adding Glenn Directives to the Web
		LeR-W0620.3.7.5.005 Removing Glenn Directives from the Web
6.2.4 Electronic Forms Management	LeR-P3.7.2.2 Forms Management	LeR-W0620.3.7.2.2.001 Annual Survey of Center Forms
		LeR-W0620.3.7.2.2.002 Create a New Center Form
		LeR-W0620.3.7.2.2.003 Revise a Center Form
		LeR-W0620.3.7.2.2.004 Request To Have a Form Printed
6.2.5 Center Information Directory	GRC-P Information Sources	TBD
6.2.6 Distribution	(see 6.2.5 above)	TBD
6.2.7 Records Management	LeR-P3.7.3 Records Management	LeR-W0620.3.7.3.001 Records Management Operations
6.2.8 Historian		TBD
6.2.9 Document Administrator	N/A	N/A
6.2.10 Contract Management Support	N/A	TBD
6.2.11 Scheduling	GRC-P Guerin House and Picnic Grounds Scheduling	TBD
6.2.12 Move Operations	GRC-P Move Scheduling	TBD
6.11 Information Systems Support	N/A	N/A
7.1 Unscheduled Clerical Support	GRC-P	TBD

The COTR in cooperation with the Contractor will write the work instructions for tasks 6.1 Unscheduled Administrative Support and 7.1 Unscheduled Clerical Support.

C-9 CONTRACT WORK BREAKDOWN STRUCTURE**TOTAL CONTRACT – Management Operations Contract-1 (MOC-1)**

- Task 1.0 LOGISTICS
 - 1.1 Property Management Service
 - 1.1.1 Property Management
 - 1.1.1.1 NASA Equipment Management System (NEMS) Equipment Database Management
 - 1.1.1.2 Equipment Inventory
 - 1.1.1.3 Loans
 - 1.1.1.4 Financial Reconciliation
 - 1.1.1.5 Equipment Services Program
 - 1.1.1.6 Survey Records
 - 1.1.1.7 Reporting Requirements
 - 1.1.2 Property Disposal
 - 1.1.2.1 Receipt and Warehouse of Excess Property
 - 1.1.2.2 Utilization
 - 1.1.2.3 Donation
 - 1.1.2.4 Exchange and/or Sale of Property
 - 1.1.2.5 Government Property Held and Reported by Glenn Contractors and/or Grantees
 - 1.1.2.6 Disposal of Scrap Material and Abandonment and/or Destruction
 - 1.1.2.7 Accountable Records and Reporting
 - 1.1.3 Hold Storage
 - 1.2 Freight Traffic
 - 1.2.1 Freight Coordination
 - 1.2.1.1 Material Movements
 - 1.2.1.2 Outbound Freight
 - 1.2.1.3 Inbound Freight
 - 1.2.1.4 U.S. Government Bills of Lading (GBL) and Commercial Bills of Lading (CBL)
 - 1.2.1.5 Verification of Freight Charges
 - 1.2.1.6 Personal Property
 - 1.2.1.7 Carrier Selection (Other than Personal Property)
 - 1.2.2 Shipping
 - 1.2.3 Receiving
 - 1.2.4 Shipping and Receiving Documentation
 - 1.3 Stock Purchases
 - 1.4 Supply Management
 - 1.4.1 Inventory
 - 1.4.1.1 Inventory Management
 - 1.4.1.2 Cataloging
 - 1.4.1.3 Chemical Purchasing

- 1.4.2 Warehouse
 - 1.4.2.1 General Warehousing
 - 1.4.2.2 Storage Space Operation
 - 1.4.2.3 Substore Management
- 1.4.3 Central Chemical Storage Facility Operation
 - 1.4.3.1 Hazardous Storage and/or Warehouse
 - 1.4.3.2 Hazardous Receiving and/or Shipping
 - 1.4.3.3 Container Program
- 1.4.4 Laundry Services
- 1.5 Transportation Operations
 - 1.5.1 Personnel Transportation
 - 1.5.1.1 Bus
 - 1.5.1.2 Taxi Service and Handicapped Transportation
 - 1.5.1.3 Airport Courier
 - 1.5.1.4 Special Events
 - 1.5.1.5 Dispatch
 - 1.5.2 Dry Cargo
 - 1.5.3 Mail Processing
 - 1.5.4 Recycling
 - 1.5.5 Vehicle Maintenance
 - 1.5.6 Motorpool Vehicle Dispatcher
 - 1.5.7 Garage Administration
 - 1.5.8 Fuels Distribution

Task 2.0 IMAGING TECHNOLOGY

- 2.1 Production Administration Support
- 2.2 Scientific Imaging
- 2.3 Video/Multimedia
 - 2.3.1 Video Production
 - 2.3.2 Multimedia
- 2.4 Still Imaging
 - 2.4.1 Digital Imaging
 - 2.4.2 Still Imaging
 - 2.4.3 Photofinishing
- 2.5 Audiovisual
- 2.6 Law Enforcement Support
- 2.7 Archiving
- 2.8 Photographic Document of Research

Task 3.0 PUBLISHING

- 3.1 Scientific & Technical Publishing
 - 3.1.1 Coordination
 - 3.1.2 Editing
 - 3.1.3 Manuscript Support
 - 3.1.4 Layout/Electronic Publishing
 - 3.1.5 Publication Graphics
 - 3.1.6 Graphics Services
- 3.2 Duplicating Facility Support, Copiers, GPO Printing
 - 3.2.1 Facility Support
 - 3.2.2 Administrative Equipment Service
 - 3.2.3 Government Printing Office (GPO) Support
 - 3.2.4 Copier Management

Task 4.0 METROLOGY

- 4.1 Calibration Services
- 4.2 Instrument Pool
- 4.3 Dimensional Calibration

Task 5.0 LIBRARY

- 5.1 Circulation Desk
- 5.2 Collection Management
- 5.3 Acquisitions
 - 5.3.1 Subscription Materials
 - 5.3.2 Nonsubscription Materials Including Document Delivery
 - 5.3.3 Interlibrary Loans
 - 5.3.4 Project Documentation

- 5.4 Cataloging
- 5.5 Reference Services
- 5.6 Electronic Library

Task 6.0 ADMINISTRATIVE SUPPORT

- 6.1 Unscheduled Administrative Support
- 6.2 Administrative Programs
 - 6.2.1 Special Projects
 - 6.2.2 Accounting Support
 - 6.2.3 Directives Processing/Distribution
 - 6.2.4 Electronic Forms Management
 - 6.2.5 Reserved
 - 6.2.6 Reserved
 - 6.2.7 Changed to WBS 6.31
 - 6.2.8 Historian
 - 6.2.9 Document Administrator (COMPLETE)
 - 6.2.10 Contract Management Support
 - 6.2.11 Scheduling
 - 6.2.12 Move Operations
- 6.3 Drawing File Management, Maintenance and Reproduction
- 6.4 Organizational Development and Training Office Support
 - 6.4.1 Learning Center
 - 6.4.2 (Reserved)
 - 6.4.3 (Reserved)
 - 6.4.4 Administrative Short Courses
 - 6.4.4.1 NASA Correspondence Management and Communications Standards (NPG 1450.10C)
 - 6.4.4.2 Distance Learning
- 6.5 Community and Media Relations Editorial Support
- 6.6 Financial Management Support
 - 6.6.1 Accountant Support
 - 6.6.2 Grants Accounting
- 6.7 Resource Analysis Management Office Support
- 6.8 Administrative Project Coordination
 - 6.8.1 Financial/Special Project Support
 - 6.8.2 General Clerical
- 6.9 Interagency Advanced Power Group (IAPG) Power Information Center
- 6.10 Space Program Plan Development Support (COMPLETE)
- 6.11 Information Systems Support (ISS)
- 6.12 Educational Programs Support
- 6.13 Commercial Technology Support
 - 6.13.1 (moved to 6.15) COMPLETE
 - 6.13.2 COMPLETE
 - 6.13.3 Computer Systems Development

- 6.13.4 (moved to 6.15) COMPLETE
- 6.13.5 BMS/ISO Process Support
- 6.13.6 Technology Transfer Success Story Support
- 6.14 Analex Contract Closeout Property Assessment (COMPLETE)
- 6.15 SBIR/STTR Program Support
 - 6.15.1 SBIR/STTR Program Assistance
 - 6.15.2 Financial Tracking
- 6.16 Mobile Television Production Van
- 6.17 Technology Conference Support (COMPLETE)
- 6.18 Science Engineering Mathematics Aerospace Academy (SEMAA)
Program Management Support
- 6.19 Telescience Support Center (TSC) Property Assessment
(COMPLETE)
- 6.20 Army Corps of Engineers (Reserved)
- 6.21 Business Development and Marketing Support
- 6.22 (Reserved)
- 6.23 Office of Education Programs, Program Coordinator
- 6.24 Educational Technology Specialist Support
- 6.25 Communications Support for Manufacturing and Engineering Division
- 6.26 Administrative Support of the Manufacturing Engineering Division
- 6.27 Advanced Communications Satellite (ACTS) University Education
Consortium Support (COMPLETE)
- 6.28 Airport Expansion/S-40 Asset Relocation
- 6.29 History of NASA's Plum Brook Reactor Facility
- 6.30 Integrated Financial Management (IFM) Program Training
Coordination
- 6.31 Records Management
- 6.32 RETF Historical Preservation

Task 7.0 CLERICAL SUPPORT

- 7.1 Unscheduled Clerical Support
- 7.2 0100/Office of the Director
- 7.3 0120/Office of Chief Counsel
- 7.4 0140/Aeropropulsion Research Program Office
 - 7.4.1 General Clerical
 - 7.4.2 Computer Illustration
- 7.5 0106/ISO Project Office (Reserved)
- 7.6 0170/Plans and Programs Office (COMPLETE)
- 7.7 0180/Office of Equal Opportunity Programs
- 7.8 0210/Resources Analysis and Management Office (Reserved)
- 7.9 0220/Financial Management Division (Reserved)
- 7.10 0300/Vehicle Technology Directorate
 - 7.10.1 General Clerical (COMPLETE)
 - 7.10.2 General Accounting
 - 7.10.3 Administrative Support
- 7.11 0400/Office of Human Resources
 - 7.11.1 Insurance Office
 - 7.11.2 Office of Human Resources
 - 7.11.3 Organizational Development and Training Office
 - 7.11.4 Expert Center for Information Technology Security Support
- 7.12 0500/Office of Safety and Assurance Technologies
 - 7.12.1 General Clerical
 - 7.12.2 0530/Glenn Safety Office
 - 7.12.3 0540/Environmental Management Office
 - 7.12.3.1 Web Management
 - 7.12.3.2 Desk Top Publishing
 - 7.12.3.3 Budget Management
- 7.13 0610/Procurement Division
 - 7.13.1 Computer and Data Entry Services
 - 7.13.2 Filing and Typing Services
 - 7.13.3 Small Purchase Services
 - 7.13.4 Mail and Distribution Services
 - 7.13.5 Reproduction, Fax and Printer Services
 - 7.13.6 General Clerical
 - 7.13.7 IFMP Data Conversion
 - 7.13.8 Documentation
- 7.14 2000/Aeronautics Directorate
 - 7.14.1 Directorate Support
 - 7.14.1.1 Aeronautics Directorate Clerical Support
 - 7.14.2 Ultra-Efficient Engine Technology Program Office
 - 7.14.2.1 Administrative Clerical
 - 7.14.2.2 Support UEET Program Office
 - 7.14.2.3 Maintain UEET Travel Budget
 - 7.14.2.4 UEET Meeting/Conference Logistics

- Management
 - 7.14.2.5 Budget Support Specialist
 - 7.14.2.6 UEET Program and Outreach Specialist
 - 7.14.2.7 Turbine-Based Combined Cycle (TBCC) Program and Outreach Specialist
 - 7.14.3 Subsonic Systems Office
 - 7.14.3.1 General Clerical
- 7.15 5000/Research and Technology Directorate
 - 7.15.1 5100 & 5120/Materials Division & Advanced Metallics Branch
 - 7.15.2 Communication Specialist
- 7.16 6100/Space Communications Office
 - 7.16.1 General Clerical Support
 - 7.16.2 High Rate Data Delivery TAM Support (Reserved)
 - 7.16.3 6140/Spectrum Management Office Support
- 7.17 6500/Space Transportation Project Office
 - 7.17.1 General Clerical Support
 - 7.17.2 Administrative Support
 - 7.17.3 Administrative Coordinator
- 7.18 6700/Microgravity Science Division
- 7.19 6900/Power and Propulsion Office (Reserved)
- 7.20 7100/Computer Services Division (CSD)
- 7.21 7200/Test Installations Division (TID)
- 7.22 7400/Manufacturing Engineering Division (MED)
- 7.23 7500/Facilities and Test Engineering Division (FTED)
- 7.24 7700/Engineering Design and Analysis Division (EDAD)
- 7.25 9200/Office of Educational Programs (OEP) (COMPLETE)
- 7.26 6000/Space Directorate
- 7.27 7800/Systems Engineering Division
 - 7.27.1 General Clerical Support
 - 7.27.2 7820/Analysis and Integration Group
 - 7830/Technical Resource Management Group
- 7.28 9300/Community and Media Relations Support
- 7.29 9400/Commercial Technology Office Support (CTO)
 - 7.29.1 Tech Briefs Support
 - 7.29.2 Contract Support
- 7.30 9000/External Programs Directorate
 - 7.30.1 Undergraduate Scholar Program Support
 - 7.30.2 Clerical Support
- 7.31 Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) Program Support
 - 7.31.1 General Clerical
 - 7.31.2 Administrative
- 7.32 0160/Office of the Inspector General (COMPLETE)
- 7.33 7740/Structural Analysis Branch (COMPLETE)

(End of Front Section of SOW)